Appendix: MaxML Tag Reference

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09988857.111501

<block>

Defines a block in a document.

Usage

```
<block>
</block>
```

Parents

<view>, <tieritem>, <form>

Children

(<head1>|<head2>|<para>|<list>|<if>|<foreach>)*

Example

The following example is a simple "Hello World" written in MaxML.

```
<portlet title="Hello" defaultview="hello">
        <view name="hello" type="PORTAL">
                <title>Hello</title>
                <block>
                        <para>Hello World.</para>
                </block>
        </view>
</portlet>
```

<column>

Defines a column in a table.

Usage

<column name=“*name*” title=“*title*” shorttitle=“*shorttitle*”>
</column>

name
Defines the name of the column.
title
Defines the title of the column.
shorttitle
Defines the shorttitle of a column to be used

Parents

<table>

Children

EMPTY

Example

```
<table>
        <column name=“title” title=“Title”/>
        <column name=“author” title=“Author”/>
        <orderby column=“title”/>

        <searchable column=“title”>
                <foreach xpath=“//TITLE”>
                        <value><dynamic xpath=“.”/></value>
                </foreach>
        </searchable>

        <foreach xpath=“//BOOK”>
                <tuple>
                        <td column=“title”><dynamic xpath=“TITLE”/></td>
                        <td column=“author”><dynamic xpath=“AUTHOR”/></td>
                </tuple>
        </foreach>
</table>
```

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<dynamic/>

Inserts dynamic content and executes xpath.

Usage

<dynamic xpath="*xpath_value*"/>

xpath

Parents

<listitem>, <head1>, <head2>, <para>, <emph>, <strong>

Children

EMPTY

Example

```
<view name="portlet" type="PORTAL" logic="hellologic">
        <title>Hello</title>
        <block>
            <foreach xpath="//NAME">
              <para>hello <dynamic xpath="."/></para>
            </foreach>
        </block>
</view>
```

<emph>

Indicates that something is supposed to be stressed.

Usage

```
<emph>
</emph>
```

Parents

<listitem>, <head1>, <head2>, <para>, <emph>, <strong>

Children

(#PCDATA|<emph>|<strong>|<image>|<dynamic>|<if>|<foreach>)*

Example

```
<para>
        This is an example of <emph>emphasis.</emph>
</para>
```

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<foreach>

Iterates through a list of elements.

Usage

```
<foreach xpath="xpath_value">
</foreach>
```

xpath

Parents

<view>, <tieredlist>, <tieritem>, <heading>, <list>, <selectlist>, <option>, <form>, <table>, <searchable>, <tuple>

Children

ANY

Example

```
<table>
        <column name="title" title="Title"/>
        <column name="author" title="Author"/>
        <orderby column="title"/>

        <searchable column="title">
                <foreach xpath="//TITLE">
                        <value><dynamic xpath="."/></value>
                </foreach>
        </searchable>

        <foreach xpath="//BOOK">
                <tuple>
                        <td column="title"><dynamic xpath="TITLE"/></td>
                        <td column="author"><dynamic xpath="AUTHOR"/></td>
                </tuple>
        </foreach>
</table>
```

<form>

Defines a form area in a document.

Usage

```
<form target="target">
</form>
```

target

Parents

```
<tieritem>
```

Children

```
(<selectlist>|<textinput>|<block>|<if>|<foreach>|<hidden>)+
```

Example

```
<view name="portlet" type="PORTAL" invocation="horoscopelogic">
        <title>Horoscope</title>
        <form action="portlet">
                <if xpath="//sign">
                        <then>
                                <block>
                                        <head1><dynamic xpath="//sign"/></head1>
                                        <para><dynamic xpath="//reading"/></para>
                                </block>
                        </then>
                </if>
                <selectlist name="sign" default="{//sign}">
                        <option value="Aries"> Aries</option>
                        <option value="Taurus">Taurus</option>
                        <option value="Gemini">Gemini</option>
                        <option value="Cancer">Cancer</option>
                        <option value="Leo">Leo</option>
                        <option value="Virgo">Virgo</option>
                        <option value="Libra">Libra</option>
                        <option value="Scorpio">Scorpio</option>
                        <option value="Sagittarius">Sagittarius</option>
                        <option value="Capricorn">Capricorn</option>
                        <option value="Aquarius">Aquarius</option>
                        <option value="Pisces">Pisces</option>
```

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```
            </selectlist>
        </form>
    </view>
```

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<head1><head2>

Indicates that something is a heading, can be equated to <h1> and <h2> in html.

Usage

```
<head1>Heading</head1>
```

Parents

```
<block>
```

Children

```
(#PCDATA|<emph>|<strong>|<image>|<dynamic>|<if>|<foreach>)*
```

Example

```
<head1>Technology Headlines</head1>
```

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<heading>

Used to declare a heading.

Usage

<heading>....</heading>

Parents

<tieritem>

Children

(#PCDATA|<dynamic>|<if>|<foreach>)*

Example

```
<tieredlist>
        <foreach set="//CATEGORIES/CATEGORY">
                <tieritem>
                        <heading><dynamic xpath="NAME"/></heading>
                        <if xpath="HEADLINE">
                        <then>
                                <block>
                                        <list>
                                                <foreach xpath="HEADLINE">
<listitem detail="ArticleView?ARTICLEID={./@ID}">
                                                        <dynamic xpath="."/>
                                                        </listitem>
                                                </foreach>
                                        </list>
                                </block>
                        </then>
                        <else>
                                <block><para>No Headlines!</para></block>
                        </else>
                        </if>
                </tieritem>
        </foreach>
</tieredlist>
```

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<hidden/>

Used to pass a hidden value.

Usage

<hidden name="*name*" value="*value*"/>

name

value

Parents

<form>

Children

EMPTY

Example

<hidden>

••••••••••••••••••

</hidden>

<if><then><else>

Add Conditional Logic.

Usage

```
<if xpath="xpath_expression">
        <then>
                child elements
        </then>
        <else>
                child elements
        </else>
</if>
```

xpath

xpath_expression is any xpath expression. It is converted to a boolean using the xpath boolean() function. See the xpath specification for the definitive statement of how this works, but the basic algorithm is:

INSERT XPATH BOOLEAN FUNCTION HERE.....

Parents

<view>, <tieredlist>, <tieritem>, <heading>, <list>, <selectlist>, <option>, <form>, <table>, <searchable>, <tuple>

Children

<then>
<else>?

Example

```
<tieritem>
        <heading><dynamic xpath="NAME"/></heading>
        <if xpath="HEADLINE">
        <then>
                <block>
                        <list>
                                <foreach xpath="HEADLINE">
<listitem detail="ArticleView?ARTICLEID={./@ID}">
                                        <dynamic xpath="."/>
                                        </listitem>
                                </foreach>
```

```
                    </list>
                </block>
            </then>
            <else>
                <block><para>No Headlines!</para></block>
            </else>
            </if>
        </tieritem>
```

09988857.111501

<image>

Inserts an image into the document.

Usage

<image src="*path*"/>

src

Defines the path of the image to be inserted.

Parents

<listitem>, <head1>, <head2>, <para>, <emph>, <strong>

Children

EMPTY

Example

```
<para>
        <image src="images/example.jpg"/>
</para>
```

09988857.111501

<invocation>

Defines a specific invocation of a target.

Usage

```
<invocation name="logic" target="java">
        child elements
</invocation>
```

name
Used to define a name for the invocation.

target
Used to define the target value.

Parents

<invocations>

Children

<param>*

Example

```
<portlet name="hello" title="Hello" defaultview="portlet">
        <invocations>
                <target name="java" type="local">
                        <param name="class" value="HelloBusinessLogic"/>
                </target>
                <invocation name="hellologic" target="java">
                        <param name="method" value="Logic"/>
                </invocation>
        </invocations>
        <view name="portlet" type="PORTAL" logic="hellologic">
                <title>Hello</title>
                <block>
                    <foreach xpath="//NAME">
                      <para>hello <dynamic path="."/></para>
                    </foreach>
                </block>
        </view>
</portlet>
```

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<invocations>

Used to define business logic invocations.

Usage

```
<invocations>
        <target>
                child elements
        </target>
        <invocation>
                child elements
        </invocation>
</invocations>
```

Parents

```
<portlet>
```

Children

```
<target>+
<invocation>+
```

Example

```
<portlet name="hello" title="Hello" defaultview="portlet">
        <invocations>
                <target name="java" type="local">
                        <param name="class" value="HelloBusinessLogic"/>
                </target>
                <invocation name="hellologic" target="java">
                        <param name="method" value="Logic"/>
                </invocation>
        </invocations>
        <view name="portlet" type="PORTAL" logic="hellologic">
                <title>Hello</title>
                <block>
                    <foreach xpath="//NAME">
                      <para>hello <dynamic path="."/></para>
                    </foreach>
                </block>
        </view>
</portlet>
```

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<link>

Defines a link.

Usage

```
<link target="target">
</link>
```

target
Defines the target to be used.

Parents

<view>

Children

(#PCDATA|<dynamic>)*

Example

```
<link target="................">
</link>
```

09988857.111501

<links>

Declares a set of links.

Usage

```
<links>
</links>
```

Parents

<view>

Children

(<viewlink> | <link>)+

Example

```
<links>
</links>
```

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<list>

Defines a list structure.

Usage

```
<list>
        child elements
</list>
```

Parents

```
<block>
```

Children

```
(<listitem>|<if>|<foreach>)+
```

Example

```
<tieritem>
        <heading><dynamic xpath="NAME"/></heading>
        <if xpath="HEADLINE">
        <then>
                <block>
                        <list>
                                <foreach xpath="HEADLINE">
<listitem detail="ArticleView?ARTICLEID={./@ID}">
                                        <dynamic xpath="."/>
                                        </listitem>
                                </foreach>
                        </list>
                </block>
        </then>
        <else>
                <block><para>No Headlines!</para></block>
        </else>
        </if>
</tieritem>
```

09988857 .111501

<listitem>

Defines an item in a list.

Usage

```
<listitem detail="detail">
        ......
</listitem>
```

detail

....

Parents

<list>

Children

(#PCDATA|<emph>|<strong>|<image>|<dynamic>|<if>|<foreach>)*

Example

```
<list>
        <foreach xpath="HEADLINE">
                <listitem detail="ArticleView?ARTICLEID={./@ID}">
                        <dynamic xpath="."/>
                </listitem>
        </foreach>
</list>
```

09988857.111501

<option>

Defines an option in a select list.

Usage

```
<option value="value">
</option>
```

value

Parents

<selectlist>

Children

(#PCDATA|<if>|<foreach>|<dynamic>)*

Example

```
<selectlist name="sign" default="{//sign}">
        <option value="Aries"> Aries</option>
        <option value="Taurus">Taurus</option>
        <option value="Gemini">Gemini</option>
        <option value="Cancer">Cancer</option>
        <option value="Leo">Leo</option>
        <option value="Virgo">Virgo</option>
        <option value="Libra">Libra</option>
        <option value="Scorpio">Scorpio</option>
        <option value="Sagittarius">Sagittarius</option>
        <option value="Capricorn">Capricorn</option>
        <option value="Aquarius">Aquarius</option>
        <option value="Pisces">Pisces</option>
</selectlist>
```

<orderby>

Defines the column by which to order the table.

Usage

```
<orderby column="column_name">
</orderby>
```

column

Designates the column by which to order the result set.

Parents

```
<table>
```

Children

EMPTY

Example

```
<table>
        <column name="title" title="Title"/>
        <column name="author" title="Author"/>
        <orderby column="title"/>
        <searchable column="title">
                <foreach xpath="//TITLE">
                        <value><dynamic xpath="."/></value>
                </foreach>
        </searchable>

        <foreach xpath="//BOOK">
                <tuple>
                        <td column="title"><dynamic xpath="TITLE"/></td>
                        <td column="author"><dynamic xpath="AUTHOR"/></td>
                </tuple>
        </foreach>
</table>
```

<para>

Indicates that something is a paragraph.

Usage

<para>*content*</para>

Parents

<block>

Children

(#PCDATA|<emph>|<strong>|<image>|<dynamic>|<if>|<foreach>)*

Example

```
<portlet title="Hello" defaultview="hello">
        <view name="hello" type="PORTAL">
                <title>Hello</title>
                <block>
                        <para>Hello World.</para>
                </block>
        </view>
</portlet>
```

<param/>

Dependent on the type of target defined.

Usage

```
<param name="name" value="value"/>
```

name
Used to define a name for the invocation.

value
Used to define the target value.

Parents

```
<target>
<invocation>
```

Children

EMPTY

Example

```
<portlet name="hello" title="Hello" defaultview="portlet">
        <invocations>
                <target name="java" type="local">
                        <param name="class" value="HelloBusinessLogic"/>
                </target>
                <invocation name="hellologic" target="java">
                        <param name="method" value="Logic"/>
                </invocation>
        </invocations>
        <view name="portlet" type="PORTAL" logic="hellologic">
                <title>Hello</title>
                <block>
                    <foreach xpath="//NAME">
                      <para>hello <dynamic path="."/></para>
                    </foreach>
                </block>
        </view>
</portlet>
```

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<portlet>

Root tag of a MaxML document used to define the portlet that you're creating.

Usage

<portlet title="*title*" defaultview="*defaultview*">
document contents
</portlet>

title
Defines the title of the portlet.

defaultview
Defines the name of the default view for a portlet.

Parents

none

Children

<invocations>?
<view>+

Example

```
<?xml version="1.0" standalone="no"?>

<!DOCTYPE PORTLET SYSTEM http://maxml.org/dtd/portlet.dtd">

<portlet title="Hello" defaultview="hello">
        <view name="hello" type="PORTAL">
                <title>Hello</title>
                <block>
                        <para>Hello World.</para>
                </block>
        </view>
</portlet>
```

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<searchable>

Defines a column of a table to be the primary key.

Usage

```
<searchable column="column">
</searchable>
```

column

Parents

```
<table>
```

Children

```
(<value>|<if>|<foreach>)+
```

Example

```
<table>
        <column name="title" title="Title"/>
        <column name="author" title="Author"/>
        <orderby column="title"/>
        <searchable column="title">
                <foreach xpath="//TITLE">
                        <value><dynamic xpath="."/></value>
                </foreach>
        </searchable>

        <foreach xpath="//BOOK">
                <tuple>
                        <td column="title"><dynamic xpath="TITLE"/></td>
                        <td column="author"><dynamic xpath="AUTHOR"/></td>
                </tuple>
        </foreach>
</table>
```

<selectlist>

Defines a selectlist.

Usage

```
<selectlist name="name" default="default" title="title">
        ........
</selectlist>
```

name

default

title

Parents

`<form>`

Children

`(<option>|<if>|<foreach>)+`

Example

```
<view name="portlet" type="PORTAL" invocation="horoscopelogic">
        <title>Horoscope</title>
        <form action="portlet">
                <selectlist name="sign" default="{//sign}">
                        <option value="Aries"> Aries</option>
                        <option value="Taurus">Taurus</option>
                        <option value="Gemini">Gemini</option>
                        <option value="Cancer">Cancer</option>
                        <option value="Leo">Leo</option>
                        <option value="Virgo">Virgo</option>
                        <option value="Libra">Libra</option>
                        <option value="Scorpio">Scorpio</option>
                        <option value="Sagittarius">Sagittarius</option>
                        <option value="Capricorn">Capricorn</option>
                        <option value="Aquarius">Aquarius</option>
                        <option value="Pisces">Pisces</option>
                </selectlist>
        </form>
</view>
```

<strong>

Indicates that something is supposed to be stressed as much as possible.

Usage

```
<strong>
</strong>
```

Parents

<listitem>, <head1>, <head2>, <para>, <emph>, <strong>

Children

(#PCDATA|<emph>|<strong>|<image>|<dynamic>|<if>|<foreach>)*

Example

```
<para>
        This is an example of <strong>strong.</strong>
</para>
```

<table>

Defines that something is a table interaction.

Usage

```
<table>
</table>
```

Parents

<view>, <tieritem>

Children

(<column>|<if>|<foreach>)+
<orderby>|<if>|<foreach>
<searchable>|<if>|<foreach>
(<tuple>|<if>|<foreach>)*

Example

```
<view type=“PORTAL” name=“BookList” logic=“selectBooks”>
        <title>Books</title>
        <table>
                <column name=“title” title=“Title”/>
                <column name=“author” title=“Author”/>
                <orderby column=“title”/>
                <searchable column=“title”>
                        <foreach xpath=“//TITLE”>
                                <value><dynamic xpath=“.”/></value>
                        </foreach>
                </searchable>

                <foreach xpath=“//BOOK”>
                        <tuple>
                                <td column=“title”><dynamic xpath=“TITLE”/></td>
                                <td column=“author”>
                                        <dynamic xpath=“AUTHOR”/>
                                </td>
                        </tuple>
                </foreach>
        </table>
</view>
```

<target>

Defines an invocation target and parameters that are specific to the invocation type.

Usage

```
<target name="name" type="type">
        child elements
</target>
```

name
Used to declare the name of the target.

type
Used to declare the type of the target.

Parents

<invocations>

Children

<param>*

Example

```
<portlet name="hello" title="Hello" defaultview="portlet">
        <invocations>
                <target name="java" type="local">
                        <param name="class" value="HelloBusinessLogic"/>
                </target>
                <invocation name="hellologic" target="java">
                        <param name="method" value="Logic"/>
                </invocation>
        </invocations>
        <view name="portlet" type="PORTAL" logic="hellologic">
                <title>Hello</title>
                <block>
                    <foreach xpath="//name">
                       <para>hello <dynamic path="."/></para>
                    </foreach>
                 </block>
         </view>
 </portlet>
```

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<td>

Declares a cell in a table.

Usage

```
<td column="column">
        ....
</td>
```

column

Parents

<tuple>

Children

(#PCDATA|<emph>|<strong>|<image>|<dynamic>|<if>|<foreach>)*

Example

```
<table>
        <column name="title" title="Title"/>
        <column name="author" title="Author"/>
        <orderby column="title"/>
        <searchable column="title">
                <foreach xpath="//TITLE">
                        <value><dynamic xpath="."/></value>
                </foreach>
        </searchable>

        <foreach xpath="//BOOK">
                <tuple>
                        <td column="title"><dynamic xpath="TITLE"/></td>
                        <td column="author"><dynamic xpath="AUTHOR"/></td>
                </tuple>
        </foreach>
</table>
```

<textinput>

Defines a text input area in a document.

Usage

<textinput name=“*name*” title=“*title*”>
...
</textinput>

name

title

Parents

<form>

Children

(#PCDATA|<dynamic>)*

Example

<textinput>
</textinput>

09988857.111501

<tieredlist>

Used to define a Tiered List interraction.

Usage

```
<tieredlist>
        child elements
</tieredlist>
```

Parents

```
<view>
```

Children

```
(<tieritem>|<if>|<foreach>)+
```

Example

```
<view name="CategoryView" type="PORTAL" logic="categories">
        <title>News</title>
        <tieredlist>
                <foreach set="//CATEGORIES/CATEGORY">
                        <tieritem>
                                <heading><dynamic xpath="NAME"/></heading>
                                <if xpath="HEADLINE">
                                <then>
                                        <block>
                                                <list>
                                                        <foreach xpath="HEADLINE">
<listitem detail="ArticleView?ARTICLEID={./@ID}">
                                                                <dynamic xpath="."/>
                                                                </listitem>
                                                        </foreach>
                                                </list>
                                        </block>
                                </then>
                                <else>
                                        <block><para>No Headlines!</para></block>
                                </else>
                                </if>
                        </tieritem>
                </foreach>
        </tieredlist>
```

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```
</view>
```

09588857.111501

<tieritem>

Used to define an item in a tier.

Usage

```
<tieritem>
        <heading>............</heading>
        .............
</tieritem>
```

Parents

```
<tieredlist>
```

Children

```
<heading>
(<tieritem>|<if>|<foreach>)+ |(<form>|<block>|<table>|<if>|<foreach>)
```

Example

```
<view name="CategoryView" type="PORTAL" logic="categories">
        <title>News</title>
        <tieredlist>
                <foreach set="//CATEGORIES/CATEGORY">
                        <tieritem>
                                <heading><dynamic xpath="NAME"/></heading>
                                <if xpath="HEADLINE">
                                <then>
                                        <block>
                                                <list>
                                                        <foreach xpath="HEADLINE">
<listitem detail="ArticleView?ARTICLEID={./@ID}">
                                                                <dynamic xpath="."/>
                                                                </listitem>
                                                        </foreach>
                                                </list>
                                        </block>
                                </then>
                                <else>
                                        <block><para>No Headlines!</para></block>
                                </else>
                                </if>
                        </tieritem>
```

```
            </foreach>
        </tieredlist>
    </view>
```

<title>

Defines the title of the view.

Usage

```
<title>
        Title
</title>
```

Parents

```
<view>
```

Children

```
(#PCDATA|<dynamic>)*
```

Example

```
<portlet title="Hello" defaultview="hello">
        <view name="hello" type="PORTAL">
                <title>Hello</title>
                <block>
                        <para>Hello World.</para>
                </block>
        </view>
</portlet>
```

<tuple>

Usage

```
<tuple detail=“detail”>
</tuple>
```

detail

……

Parents

<table>

Children

(<td>|<if>|<foreach>)+

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Example

```
<table>
        <column name=“title” title=“Title”/>
        <column name=“author” title=“Author”/>
        <orderby column=“title”/>
        <searchable column=“title”>
                <foreach xpath=“//TITLE”>
                        <value><dynamic xpath=“.”/></value>
                </foreach>
        </searchable>

        <foreach xpath=“//BOOK”>
                <tuple>
                        <td column=“title”><dynamic xpath=“TITLE”/></td>
                        <td column=“author”><dynamic xpath=“AUTHOR”/></td>
                </tuple>
        </foreach>
</table>
```

<value>

Usage

<value>
</value>

Parents

<searchable>

Children

(#PCDATA|<dynamic>)*

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Example

```
<table>
        <column name="title" title="Title"/>
        <column name="author" title="Author"/>
        <orderby column="title"/>
        <searchable column="title">
                <foreach xpath="//TITLE">
                        <value><dynamic xpath="."/></value>
                </foreach>
        </searchable>

        <foreach xpath="//BOOK">
                <tuple>
                        <td column="title"><dynamic xpath="TITLE"/></td>
                        <td column="author"><dynamic xpath="AUTHOR"/></td>
                </tuple>
        </foreach>
</table>
```

<view>

Defines an independent user interaction.

Usage

```
<view name="name" type="type" invocation="invocation">
        child elements
</view>
```

name
Used to define a name for the view. (name can only be a combination of upper and lower case letters and numbers.)

type
Used to declare the type of view. (The defined **type** must be in all caps.)

invocation
The **invocation** attribute is used to declare an associated invocation. The name of the designated invocation must match that of an invocation defined previously in the portlet.

Parents

<portlet>

Children

<title>
<tieredlist>|<form>|<block>|<table>|<if>|<foreach>
<links>?

Example

```
<portlet title="Hello" defaultview="hello">
        <view name="hello" type="PORTAL">
                <title>Hello</title>
                <block>
                        <para>Hello World.</para>
                </block>
        </view>
</portlet>
```

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<viewlink>

Defines a link to a view.

Usage

```
<viewlink target="target">
</viewlink>
```

target

Parents

<links>

Children

(#PCDATA|<dynamic>)*

Example

```
<viewlink>
        .........
</viewlink>
```

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